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SOFTWARE PRODUCT MANAGEMENT

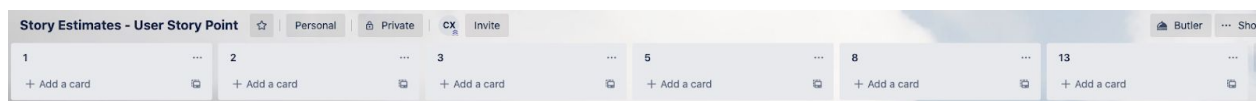
STANLEY'S PROBLEM: PART 3
ESTIMATE USER STORIES

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Estimating Stories

For this project, you've decided to use user story points to estimate the size and complexity of a story. Since the team doesn't know who will work on what, it is in everyone's interest to estimate stories as a group. Therefore, you set up a meeting with Stanley and your development team.

You explain to the team how it works: we have four developers: Madison, Zoe, Alex, and Sam. For every story, developers should discuss with each other and ask the client everything they will need to do to complete that story -- in other words, what's considered as "done"? And the client will answer the team with their best knowledge. Once that's done, every developer will write an estimate and post it to the chat. If estimates differ, we will understand this by asking the highest and the lowest to explain their estimates. And we will run another round until we reach an agreement - no compromise, no negotiation, no split the difference. Once a story point has been set, let's post it to a Trello board, under the list for its corresponding value:



After the first couple of estimates have been made, let's use another approach called Triangulate.



For every new story-to-be-estimated, we will compare it to stories in the column and see if it is about the same size: your 2 point stories should require twice as much work than your 1 point stories.

Everyone agrees with it; and proceeds with the first story from your product backlog:

US. 9 As a developer,
I want to sign up for an account,
so that I can start activities that only registered users can perform.

Developers talk about this story and ask Stanley a few questions, such as, would an email and password be enough or is a username necessary? They also talk about acceptance tests. After that, each developer posts their estimate to the chat:

Madison: 2	Alex: 1	Zoe: 1	Sam: 2
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The first couple of stories are usually harder to estimate since you have nothing to compare it with yet. The team starts a discussion. Zoe explains that sign-in is such a common feature that is almost mandatory for all services, so she thinks it's straightforward and knows what to expect. Alex agrees and adds that the team has agreed on using a Backend-as-a-Service platform (BaaS) for this project, and it should be easy since many of them offer authentication as a service.

Madison says that although the team has agreed on using BaaS, there are many uncertainties that we have to consider -- this will be the first time we are using it. Sam agrees and says we need some cushion room for learning.

After the discussion, you ask the developers to post a new estimate:

Madison: 2	Alex: 2	Zoe: 2	Sam: 2
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Alex and Zoe were convinced that there are more things to consider than they originally thought. We reached an agreement so the estimate for this story is set to 2:



US 9	As a developer, I want to sign up for an account, so that I can start activities that only registered users can perform.	Must-Have	2
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The next couple of stories are straightforward and are all given an estimation of 2: they are about the same size and complexity of US 9.

For US 6: simple search, however, developers once again have different estimation:

Madison: 2	Alex: 1	Zoe: 3	Sam: 2
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Alex explains that he knows a good searching solution and after checking their document, it seems pretty easy to integrate into projects. Zoe says that she thinks there's a lot more to consider: we need to find a good search solution, integrate it, and have enough data to test it -- we probably need to populate some dummy data to test it with first. These happen *before* actually implementing this story.

Again, the team is asked to re-estimate this story:

Madison: 3	Alex: 3	Zoe: 3	Sam: 3
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Alex, Madison and Sam are convinced that they have more work to do than they originally thought. Just because initially two members estimated 2 points, doesn't mean we will split the difference and adopt that value.

US 6	As a developer, I want to be able perform a simple search for questions that match keywords in both the title and body fields, so that I can find related questions.	Must-Have	3
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The team continues to estimate the remaining stories. In the meantime, you are updating the Trello board to match up. After estimating US 7, the board now contains at least one story in each of the 1, 2, 3, 5 columns. Moving on, the team compares each of the new stories to the estimated ones and asks if it's about the same size? There is nothing specific worth mentioning, except for US 18.



Splitting a User Story (Again)

US. 18 is about watchlist:

US 18	As an account holder, I want to put a question into a watchlist, so that I can get notifications when someone answers it.	Should-Have
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Madison has some questions about it - the story seems okay on the surface, but she feels something is missing between [adding a question to a watchlist] and [get a notification when someone answers it]. Alex agrees and points out that adding a question to a watchlist doesn't seem hard -- it will use similar logic to US 17 (bookmark). On the other hand, getting notifications will be more complicated as it involves using a push notifications service. The developers agree with them, and together they decide to split this story into two:

US 18	As an account holder, I want to put a question into a watchlist, so that I can monitor a list of questions for potential solutions.	Should-Have
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US 19	As an account holder, I want to receive notification when someone answers a question in my watchlist, so that I can check a potential solution right away.	Should-Have
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The new US 18 is about the same size and complexity of US 17; therefore, the developers estimate it as 2 points. On the other hand, receiving notification will be similar to US 16; therefore, it is estimated for 3 points. Stanley asks if US 16 has similar functionality, would it still be as complicated? The team explains that the user stories are independent, and they don't know which one they will implement first. That leads to the team putting down 3 points.

The Final List of Estimates

The team repeats the same process for the remaining stories, and none of them needs to be split. In the end, this leads to a table of all estimated stories:



	Backlog	Priority	Estimate
US 9	As a developer, I want to sign up for an account, so that I can start activities that only registered users can perform.	Must-Have	2
US 13	As an account holder, I want to post questions, so that I can receive answers from other developers.	Must-Have	2
US 14	As an account holder, I want to be able to respond to questions, so that I can assist other developers.	Must-Have	2
US 1	As a developer, I want to be able to browse questions, so that I can look for questions that interest me.	Must-Have	2
US 6	As a developer, I want to be able perform a simple search for questions that match keywords in both the title and body fields, so that I can find related questions.	Must-Have	3
US 10	As a developer, I want to sign in with an email and password, so that I can start activities that only registered users can perform.	Must-Have	2
US 20	As an account holder, I want to be able to log out of my account, so that I can keep my account safe.	Must-Have	1
US 7	As a developer, I want to be able to perform a full-text search of the question title, body, author, and category, so that I can find precisely what I want.	Should-Have	5
US 8	As a developer, I want to search for questions by category (eg. AI, Algorithms, Software Development etc.), so that I can quickly find what I'm looking for.	Should-Have	2
US 2	As a developer, I want to be able to up-vote good questions, so that developers know that this is a good solution.	Should-Have	1
US 3	As a developer, I want to be able to down-vote bad questions, so that developers don't follow this advice.	Should-Have	1
US 4	As a developer, I want answers to questions to be sorted by validity (# of up-votes), so that the best answers appear near the top.	Should-Have	1
US 15	As an account holder, I want to be able to comment on answers, so that I can elaborate on or ask questions about an answer.	Should-Have	2



US 16	As an account holder, I want to receive notification when someone answers my question, so that I can check a potential solution right away.	Should-Have	3
US 17	As an account holder, I want to bookmark a question that I find useful, so that I can navigate back to it when needed.	Should-Have	2
US 18	As an account holder, I want to put a question into a watchlist, so that I monitor a list of questions for potential solutions.	Should-Have	2
US 19	As an account holder, I want to receive notification when someone answers a question in my watchlist, so that I can check a potential solution right away.	Should-Have	3
US 21	As an account holder, I want my profile page to show the questions that I have asked or responded to so that others can see what I've posted.	Should-Have	2
US 11	As a developer, I want to sign in with my Google account, so that I don't have to remember yet another username and password.	Could-Have	1
US 12	As a developer, I want to sign in with my Github account, so that I don't have to remember yet another username and password.	Could-Have	1
US 5	As a developer, I want to see a list of similar questions to the one I am viewing, so that I can find a solution faster.	Could-Have	8
US 22	As an account holder, I want to update my profile picture, so that people can see what I look like.	Could-Have	3
US 23	As an account holder, I want to invite another user to answer one question, so that a question can be solved faster.	Won't-Have	3
US 24	As an account holder, I want to receive notification when someone invites me to answer a question, so that I can respond to it faster.	Won't-Have	3

Based on this, the team has updated the [Trello board](#) to match with it.

